Remarks

The Applicants note with appreciation that the Applicants' Claim of Priority has been acknowledged and that the previously submitted Information Disclosure Statement has been entered into the record and considered on the merits.

The Applicants have amended Claims 22, 25 and 26 to correct minor grammatical and typographical errors. No new matter has been added.

The Applicants acknowledge the rejection of Claims 22 – 26 under 35 U.S.C. §102 as being anticipated by Eichler. The Applicants note with appreciation the Examiner's helpful comments concerning the potential applicability of Eichler to the solicited claims and, in particular, that the particle size of the secondary zeolite particles and dissolved oxygen content "would be realized from" the Eichler disclosure since Eichler utilizes zeolites of the pentasil type and uses commercially available halogenated aromatics subjected to distillation, crystallization or selective adsorption.

The essence of those helpful comments is that the particle size of the secondary zeolite particles of Eichler would be "inherent", even though that word is not used. However, the Applicants respectfully submit that the use of inherency to support or reject under §102 must be based on the fact that the characteristic or claimed item at issue would necessarily flow from the disclosure of the prior art being relied upon. It is not enough that the inherent item or characteristic might, could or probably would flow. It must necessarily flow for a proper inherency rejection to be made.

The Applicants respectfully submit that Eichler does not satisfy this important requirement. There is no evidence from the Eichler disclosure, whether implicit or explicit, that the claimed

secondary zeolite particle sizes would have a maximum diameter of 5 microns or less. Reference to the Specification of Eichler demonstrates this. The portion of the Specification spanning Columns 1 – 5 is silent with respect to particles of any type in the Eichler zeolites. The point at which discussion concerning the specific characteristics of the Eichler zeolites may be found beginning at the lower portion of Column 5 and spanning into the top half of Column 6. That text refers to the "preparation of the catalyst." Such preparation is set forth in great detail, including the description of formation of a powder that was calcined at certain temperatures for periods of time, followed by treating with an ammonium nitrate solution and then washed, dried and calcined. Then, the resulting powder was processed with Al_2O_3 to provide extrudates of diameter 1.6 mm, which were calcined for four hours at 500°C, comminuted to a particle size of 0.25 to 1.0 mm and calcined in a stream of hydrogen for two hours. This is the only portion of Eichler that is even remotely relevant to the claimed secondary zeolite particles having a maximum diameter of 5 microns or less. However, there is still not one word concerning primary particles, secondary particles or the size of secondary particles. Therefore, on this basis alone, having seen that the final comminuted particle sizes are 0.25 to 1.0 mm, one of ordinary skill in the art would have the reasonable belief that the particles (which cannot be determined as to whether they are primary or secondary particles) would be far in excess of the Applicants' claimed secondary particles.

This is further reinforced by reference to the Applicants' Examples and Comparative Examples, wherein Example 1 and Comparative Example 3 demonstrate that differences in kneading times alone can have dramatic results in the size of the secondary particles. Specifically, Example 1, which is in accordance with the Applicants' invention, kneaded the material for two hours,

wherein Comparative Example 3 kneaded the catalyst for 30 minutes. The result was a sharp difference in size of the secondary particles, namely 3 microns versus 10 microns.

The point of this discussion is that one of ordinary skill in the art would have a reasonable belief that the secondary particle sizes of Eichler would be sharply different from the secondary particle sizes of the invention. As a consequence, it is not possible to say that the claimed secondary particle sizes would necessarily flow from the teachings of Eichler. In fact, the Applicants respectfully submit that the claimed secondary particle sizes would likely not flow from the teachings of Eichler. The Applicants accordingly respectfully submit that Eichler cannot support a rejection under §102 based on what is essentially inherency because the claimed particles cannot be demonstrated to necessarily flow from the Eichler disclosure. Withdrawal of the §102 rejection based on Eichler is respectfully requested.

The Applicants also acknowledge the rejection of Claims 22 – 26 under 35 U.S.C. §102 as being anticipated by Pies. The Applicants note with appreciation the Examiner's helpful comments concerning the potential applicability of Pies against the solicited claims. However, those comments, again, essentially rely on an inherency of the secondary particle size being present in the zeolites of Pies. In that regard, the Applicants note with appreciation the Examiner's specific reference to the "various zeolites" that may be used as catalysts in Column 3, beginning in the third full paragraph. The truly relevant portion of Pies may be found in the fourth full paragraph of Column 3, wherein Pies teaches that it is advantageous to use the zeolite in granulated form, such as in particles having an average particle diameter of 1 – 8 mm. On its face, it is apparent that the primary particles of Pies having an average particle diameter of 1 – 8 mm. This is orders of magnitude different than the

claimed secondary particle size of 5 microns or less. Moreover, Pies is apparently directed to primary particle diameters and never mentions secondary particle sizes. Accordingly, one of ordinary skill in the art would have the reasonable expectation that secondary particle diameters, if they exist in Pies, would be larger than the average particle diameter of what are apparently the primary particles in Pies. As a consequence, one of ordinary skill in the art would likely believe that the secondary particle sizes of Pies would be orders of magnitude larger than the claimed secondary particle sizes in the solicited claims. This means that one of ordinary skill in the art would believe that the secondary particle sizes of Pies would necessarily be different from the secondary particle sizes recited in the solicited claims. Therefore, the Applicants respectfully submit that Pies cannot be used to support what is essentially an inherency argument and, therefore, the §102 rejection must fall. Withdrawal of the rejection of Claims 22 – 26 based on Pies is respectfully requested.

In light of the foregoing, the Applicants respectfully submit that the entire Application is now in condition for allowance, which is respectfully requested.

Respectfully submitted,

T. Daniel Christenbury
Reg. No. 31,750

TDC:lh
(215) 656-3381